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EXAMINER	
CHEN, WENPENG	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/902,515	COLLINS, ROGER	
	Examiner	Art Unit	
	Wenpeng Chen	2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 April 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *30-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *30-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Examiner's responses to Applicant's remark

1. Applicants' amendments filed on 4/3/2007 have been fully considered. The amendments overcome the followings set forth in paper #20070116, mailed on 1/24/2007:

-- rejections to Claims 36-37 under 35 U.S.C. 112, second paragraph.

2. Applicant's arguments have been fully considered and but are moot in view of new ground of rejection due to Applicants' amendments.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 30, 43, and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carr (US patent 5,293,379 cited previously) in view of Togawa et al. (US 20020004821).

Carr teaches a method comprising:

-- for Claim 30, receiving data an interface from a service; (column 4, lines 33-51)

-- for Claim 30, identifying at the interface whether the data is an electronic mail (email) message or address book data; (column 6, line 64 to column 7, line 46; Figs. 4-6; The data are

identified to include address information which are address book data in the collected header field and user data which are email message.)

-- for Claim 30, applying a first set of code words to encode data in the email message; (column 6, line 64 to column 7, line 46; Figs. 5-6; The user data are coded with a user data dictionary that has a first set of code words.)

-- for Claim 30, applying a second set of code words to encode the address book data. (column 6, line 64 to column 7, line 46; Figs. 5-6; The header fields including the address book data is coded with header dictionary that has a second set of code words.)

Carr teaches a system comprising:

-- for Claim 43, a service to provide messaging and groupware services; (column 4, lines 33-51)

-- for Claim 43, an interface, coupled to receive message data from the service, including a compression module to identify whether the message data is an electronic mail (email) message or address book data, apply a first set of code words to encode data in the email message and apply a second set of code words to encode the address book data; (column 6, line 64 to column 7, line 46; Figs. 4-6; See explanation above with regard to Claim 30.)

-- for Claim 46, wherein the interface further comprises a cache to store the message data. (column 4, lines 33-40; the RAM)

However, Carr does not teach explicitly that the feature of "an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book".

Togawa teaches a method for emailing a message comprising:

-- wherein an electronic mail (email) message corresponds to a user mailbox and address book data corresponds to the user address book. (Figs. 1-3; paragraphs [0012]-[0016], [0088]-[0095]; Both message and address are associated with a user mailbox.)

It is desirable to manage received and sent emails in an organized way. It is well known that a mailbox approach is an effective and common approach for this purpose. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply Togawa's teaching too add mailbox in Carr's emailing system to store email message and address list, which is an address book, for later process because adding mailbox approach facilitates email process. The combination thus teaches:

-- identifying at the interface whether the data is an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book; (column 6, line 64 to column 7, line 46; Figs. 4-6; The data are identified to include address information which are address book data in the collected header field and user data which are email message.

5. Claims 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Carr and Togawa as applied to Claim 30, and further in view of Unger et al. (US patent 5,991,713 cited previously.)

The combination of Carr and Togawa teaches the parental Claim 30. Car further teaches that other string compression algorithms are also applicable in the method explained with Figs. 3-9, namely compressing header and data with different dictionaries. However, the combination

of Carr and Togawa does not teach explicitly that the code words are based on the frequency associated to the above claims.

Unger teaches a method for compressing a message. In the method, different types of data are coded with different dictionaries. (column 8, line 62 to column 9, line14) The method comprises:

-- generating for each dictionary a set of code words based on the frequency with which character strings represented by the code words are found within the type of data, wherein character strings which are relatively more common within the type of data are represented by relatively shorter code words in the set of code words; (column 1, lines 39-46; column 2, lines 23-54; column 9, lines 39-54; Each data of a language and subject is associated with a dictionary. Shorter token is assigned to a word of high frequency.)

-- initially performing a statistical analysis of character strings found in the type of data to determine a frequency of occurrence of each of the character strings; (To establish a dictionary based on frequency requires performing a statistical analysis of character strings in that type of data.)

-- wherein one of the techniques comprises identifying strings in the first or second fields based on a location of the strings in a spell-check dictionary. (column 8, line 61 to column 9, line 54; column 11, lines 6-18; Figs. 8-9; step 210 of Fig. 8; A dictionary of common English words is a spell check dictionary. The numbers (or tokens) are the locations.)

It is desirable to compress efficiently a text message. It is known in the art that Unger's dictionary can achieve a high degree of compression for each specific dictionary associated with a special language or subject. It would have been obvious to one of ordinary skill in the art, at the

time of the invention, to replace Carr's dictionaries with dictionaries developed with Unger's teaching for each of the header data and user data because this replacement improves compression efficiency. The overall combination thus teaches:

-- generating the first set of code words based on the frequency with which character strings represented by the code words are found within the email message;

-- generating the second set of code words based on the frequency with which character strings represented by the code words are found within the address book;

--wherein character strings which are relatively more common within the email message are represented by relatively shorter code words in the first set of code words and character strings which are relatively more common within the address book are represented by relatively shorter code words in said second set of code words.

6. Claims 30-32, 38-40, and 43-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer (US 6,842,768) in view of Carr (US patent 5,293,379 cited previously) and Togawa et al. (US 20020004821).

With regard to Claims 31-32, Shaffer teaches a method comprising:

-- receiving data an interface from a service; (Fig. 1, 2; column 3, lines 16-43; column 4, lines 12-26)

-- identifying at the interface the type of data and adaptively using its corresponding compression algorithm for compression; (column 7, line 45 to column 8, line 59; column 9, lines 45-60; For example, image, audio, and text data are compressed with different algorithms.)

-- applying a first type of compression algorithm to encode data in the first type of data; (column 7, line 45 to column 8, line 59; column 9, lines 45-60; For example, image, audio, and text data are compressed with different algorithms.)

-- applying a second type of compression algorithm to encode data in the second type of data; (column 7, line 45 to column 8, line 59; column 9, lines 45-60; For example, image, audio, and text data are compressed with different algorithms.)

-- transmitting the encoded data in the first type from the interface to a wireless processing device. (Fig. 1; column 3, lines 16-43)

However, Shaffer does not teach that the first type of data is data in the email message and that the second type of data is the address book data.

The combination of Carr and Togawa teaches a method as discussed above comprising:

-- receiving data an interface from a service; (Carr: column 4, lines 33-51)

-- identifying at the interface whether the data is an electronic mail (email) message corresponding to a user mailbox or address book data corresponding to the user address book; ((Carr: column 6, line 64 to column 7, line 46; Figs. 4-6; The data are identified to include address information which are address book data in the collected header field and user data which are email message.) (Togawa: Figs. 1-3; paragraphs [0012]-[0016], [0088]-[0095]; Both message and address are associated with a user mailbox); The motivation for combining Carr and Togawa was discussed above.)

-- applying a first set of code words to encode data in the email message; (Carr: column 6, line 64 to column 7, line 46; Figs. 5-6; The user data are coded with a user data dictionary that has a first set of code words.)

-- applying a second set of code words to encode the address book data. (Carr: column 6, line 64 to column 7, line 46; Figs. 5-6; The header fields including the address book data is coded with header dictionary that has a second set of code words.)

It is desirable to compress efficiently a text message. It is known in the art that Carr's approach can further improve compression rate of a document. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use the compression method taught by the combination of Carr and Togawa to compress emails in Shaffer's system and method because this modification improves compression efficiency.

Because Claim 31 is a dependent claim of Claim 30, the combination of Shaffer, Carr, and Togawa also teaches Claim 30.

When one compares Claims 38-40 with Claims 30-31, it is obvious that the above discussion also shows that the combination of Shaffer, Carr, and Togawa also teaches Claims 38-40.

Because both Shaffer and Carr teach systems (Shaffer: Figs. 1, 4, and 5; Carr: Fig. 1) for implementing the above-discussed method, the combination of Shaffer, Carr, and Togawa as discussed above also teaches Claims 43-45 and 48-50.

For Claims 46-47 and 51, Shaffer further teaches:

-- wherein the interface further comprises a cache to store the message data; (Figs. 1, 4, and 5; The server has a memory to store message data.)

-- a first queue to store message data to be transmitted to the wireless device; (Figs. 1, 4, and 5; The server has a memory to store message data to be transmitted to the wireless device. The memory is a first queue.)

-- a second queue to store message data received from the wireless device. (Figs. 1, 4, and 5; The server also has a memory to store message data received from the wireless device. The memory is a second queue.)

The combination of Shaffer, Carr, and Togawa thus also teaches Claims 46-47 and 51.

7. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Shaffer, Carr, and Togawa as applied to Claim 38, and further in view of Unger et al. (US patent 5,991,713 cited previously.)

The combination of Shaffer, Carr, and Togawa teaches the parental Claim 38. Car further teaches that other string compression algorithms are also applicable in the method explained with Figs. 3-9, namely compressing header and data with different dictionaries. However, the combination does not teach explicitly that the code words are based on the frequency associated to the above claims.

Unger teaches a method for compressing a message. In the method, different types of data are coded with different dictionaries. (column 8, line 62 to column 9, line14) The method comprises:

-- generating for each dictionary a set of code words based on the frequency with which character strings represented by the code words are found within the type of data, wherein character strings which are relatively more common within the type of data are represented by relatively shorter code words in the set of code words; (column 1, lines 39-46; column 2, lines 23-54; column 9, lines 39-54; Each data of a language and subject is associated with a dictionary. Shorter token is assigned to a word of high frequency.)

-- initially performing a statistical analysis of character strings found in the type of data to determine a frequency of occurrence of each of the character strings; (To establish a dictionary based on frequency requires performing a statistical analysis of character strings in that type of data.)

-- wherein one of the techniques comprises identifying strings in the first or second fields based on a location of the strings in a spell-check dictionary. (column 8, line 61 to column 9, line 54; column 11, lines 6-18; Figs. 8-9; step 210 of Fig. 8; A dictionary of common English words is a spell check dictionary. The numbers (or tokens) are the locations.)

It is desirable to compress efficiently a text message. It is known in the art that Unger's dictionary can achieve a high degree of compression for each specific dictionary associated with a special language or subject. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to replace Carr's dictionaries with dictionaries developed with Unger's teaching for each of the header data and user data because this replacement improves compression efficiency. The overall combination thus teaches:

-- generating the first set of code words based on the frequency with which character strings represented by the code words are found within the email message;

-- generating the second set of code words based on the frequency with which character strings represented by the code words are found within the address book.

8. Claims 30, 33-35, 38, and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shaffer (US 6,842,768) in view of Lindquist et al. (US 6,687,362) and the

combination of Carr (US patent 5,293,379 cited previously) and Togawa et al. (US 20020004821).

With regard to Claims 33-35, Shaffer teaches a method comprising:

-- receiving data an interface from a service; (Fig. 1, 2; column 3, lines 16-43; column 4, lines 12-26)

-- identifying at the interface the type of data and adaptively using its corresponding compression algorithm for compression; (column 7, line 45 to column 8, line 59; column 9, lines 45-60; For example, image, audio, and text data are compressed with different algorithms.)

-- applying a first type of compression algorithm to encode data in the first type of data; (column 7, line 45 to column 8, line 59; column 9, lines 45-60; For example, image, audio, and text data are compressed with different algorithms.)

-- applying a second type of compression algorithm to encode data in the second type of data; (column 7, line 45 to column 8, line 59; column 9, lines 45-60; For example, image, audio, and text data are compressed with different algorithms.)

-- transmitting the encoded data in the first type from the interface to a wireless processing device. (Fig. 1; column 3, lines 16-43)

However, Shaffer does not teach that (1) the first type of data is data in the email message, (2) the second type of data is the address book data, and (3) the header and the remainder part of an email message are coded differently.

Lindquist teaches a method to send address books to various users including internet users, wherein the address data are used in a header field of an email for sending the email. (Fig. 1; column 3, lines 19-56)

The combination of Carr and Togawa teaches a method comprising a step of using different code words for separately compressing header information and user data associated with a user mailbox. (column 6, line 64 to column 7, line 46; Figs. 4-6; Also see discussion above.)

It is desirable to sending address book data to maintain accuracy and completeness of address book. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply Lindquist's teaching to send regular data and address book data in Shaffer's system. It is also desirable to compress data efficiently as pointed out by Shaffer. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply Carr's teaching (1) to apply a first set of code words to encode data in the email message and (2) to apply a second set of code words to encode the address book data in Shaffer's system because the overall combination improves not only accuracy of address book but also compression efficiency.

Carr further teaches a method comprising:

-- identifying a header field within the email message; (column 6, line 64 to column 7, line 46; Figs. 4-6; The data list in Fig. 5 other than data are in a header field.)

-- applying the first set of code words to encode data in said header field; (column 6, line 64 to column 7, line 46; Figs. 5-6; The set of static, semi-static and dynamic fields collected header fields that represents a collected first filed is coded with header dictionary that has a first set of code words.)

-- applying a third set of code words to encode data in the remainder of the email message. (column 6, line 64 to column 7, line 46; Figs. 5-6; The user data that represent a second field are coded with a user data dictionary that has a second set of code words.)

It is desirable to further compress data. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to apply Carr's teaching to separately compressing header data and user data in an email message in the above combined system because the overall combination further improves compression efficiency.

Because Claim 33 is a dependent claim of Claim 30, the above combination teaches Claim 30.

When one compares Claims 38 and 41 with Claims 30 and 33-35, it is obvious that the combination also teaches Claims 38 and 41 as discussed above.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Wenpeng Chen whose telephone number is 571-272-7431. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bhavesh Mehta can be reached on 571-272-7453. The fax phone numbers for the organization where this application or proceeding is assigned are 571-273-8300 for regular communications and 571-273-8300 for After Final communications. TC 2600's customer service number is 571-272-2600.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2600.

Wenpeng Chen
Primary Examiner
Art Unit 2624

June 11, 2007